

## **CLAIMS**

1. A computer-implemented method of displaying information correlating a list of items and a list of their attributes comprising:
  - 5 displaying the list of items as a column of rows, each row displaying the name of an item in the list of items;
  - displaying to the side of the column a set of vertical strips extending the length of the column, each strip being associated with a different attribute of the list of attributes; and
  - displaying markers in the strips at selected positions where the strips cross rows, said
  - 10 positions being selected in accordance with whether the item named in the crossed row has (or alternatively has not) the attribute associated with that strip;
  - wherein the strips extend beyond the column of rows of items and have horizontal extensions themselves forming a column of rows, each row displaying the name of an attribute in the list of attributes.
- 15 2. A computer-implemented method of managing data elements in a computer system, each data element having at least one associated attribute, the method comprising:
  - storing identifiers of each data element and information identifying the attributes of each data element;
  - 20 displaying identifiers associated with each of the data elements in a list as a column of rows,
  - displaying a set of attribute strips extending along at least one side of the column of rows, each attribute strip being associated with a possible attribute for the data element, wherein each attribute strip has a first section containing an identifier of a possible attribute
  - 25 of a data element, a second section comprising a filter option indicator and wherein each attribute strip further comprises attribute marker sections for each data element;
  - displaying a marker in the attribute marker section of each attribute strip if the data element possesses the attribute associated with that attribute strip based on the stored data;
  - receiving user input to select at least one filter option;
  - 30 storing the selected filter options and displaying the or each corresponding filter option indicator;
  - filtering the data elements according to the or each filter option selected by the user;
  - redisplaying the filtered data elements in the column of rows and the associated

markers in the attribute marker section of each attribute strip.

3. A computer-implemented method according to Claim 2 wherein data elements can be filtered on the presence or on the absence of a selected attribute.

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4. A computer-implemented method according to Claim 2 wherein the data elements can be filtered using a combination of positively or negatively selected attributes.

5. A computer-implemented method according to Claim 2 further comprising storing  
10 information indicating whether each data element possesses each attribute.

6. A computer-implemented method according to Claim 2 wherein the attribute marker sections of the attribute strips are provided at the intersection between each attribute strip and each row in the column of rows.

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7. A computer-implemented method according to Claim 2 further comprising allowing a user to select or deselect an attribute for a data element.

8. A computer-implemented method according to Claim 7 wherein the attributes can be  
20 selected or deselected by setting the marker on or off in the attribute marker section at the intersection of the data element row and the attribute column.

9. A computer-implemented method according to Claim 2 further comprising storing a first table separately from the data elements, wherein the table comprises an identifier of each  
25 attribute and a filtering flag indicating whether the attribute has been selected for filtering.

10. A computer-implemented method according to Claim 2 further comprising providing a second table for storing information associated with the data elements wherein the table comprises a pointer to each data element and an attribute flag for each attribute in the first  
30 table showing whether the attribute is on or off.

11. A computer-implemented method according to Claim 2 wherein the attribute strips are arranged vertically down at least one side of the column of rows.

12. A computer-implemented method according to Claim 2 wherein the attribute strips have horizontal extensions, a plurality of the horizontal extensions forming a second column of rows, wherein the horizontal extension of each attribute strip includes the first section  
5 containing the attribute identifier and the second section containing the filter option indicator.

13. A computer-implemented method according to Claim 2 wherein each attribute strip is mutually visibly distinct.

10 14. A computer-implemented method according to Claim 2 further comprising providing a plurality of sets of attribute strips associated with a plurality of sets of attributes and providing selection means for a user to select one or more sets of attribute strips to be displayed.

15 15. A computer-implemented method according to Claim 14 wherein seven attribute strips are provided for each page of attributes.

16. A computer-implemented method according to Claim 15 wherein the seven attribute strips are colored in a rainbow of colors.

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17. A computer-implemented method according to Claim 2 further comprising receiving user input to create a new attribute and assign the new attribute to selected data elements.

18. A computer-implemented method according to Claim 2 wherein identifiers of data  
25 elements that are not installed are displayed.

19. A computer-implemented method for displaying a filterable list of items, the method comprising:

30 displaying the list of items as a column of rows, each row displaying various information pertaining to the item, this column being enclosed by a set of horizontal differently colored strips set one above the other across the top and a matching set of vertical colored strips down one or both sides, each vertical strip forming a right-angle with its correspondingly colored horizontal strip, together forming a rectangular approximation to a

rainbow;

displaying in each or some of the horizontal colored strips the name of an attribute that the items in the list may possess, as well as an option box to allow filtering of the list on the presence or absence of the attribute;

5           using each rectangle formed by the intersection of a vertical colored strip and a horizontal item row to display a marker if the item possesses the attribute shown in the corresponding horizontal colored strip;

          further using this rectangle, where the user is allowed to set the attribute, to accept a mouse click from the user to toggle the attribute on or off for the item;

10           allocating a first table separately from the items to be listed, each element to contain an attribute name and a flag indicating whether the attribute has been selected for filtering, and if so whether positively or negatively;

          allocating a second table for storing as many elements as there are items to be listed, each element containing a pointer to the item, as well as a flag for each attribute in the first  
15 table showing whether the attribute is on or off;

          initializing the first table with attribute names;

          generating entries in the second table for each item to be listed;

          updating the filtering flags in the first table according to input from the user;

          updating the attribute flags in the second table according to input from the user;

20           displaying the attributes together with the list of items or a subset thereof according to the two tables.

20.    A computer-readable device for carrying out a method according to Claim 2.